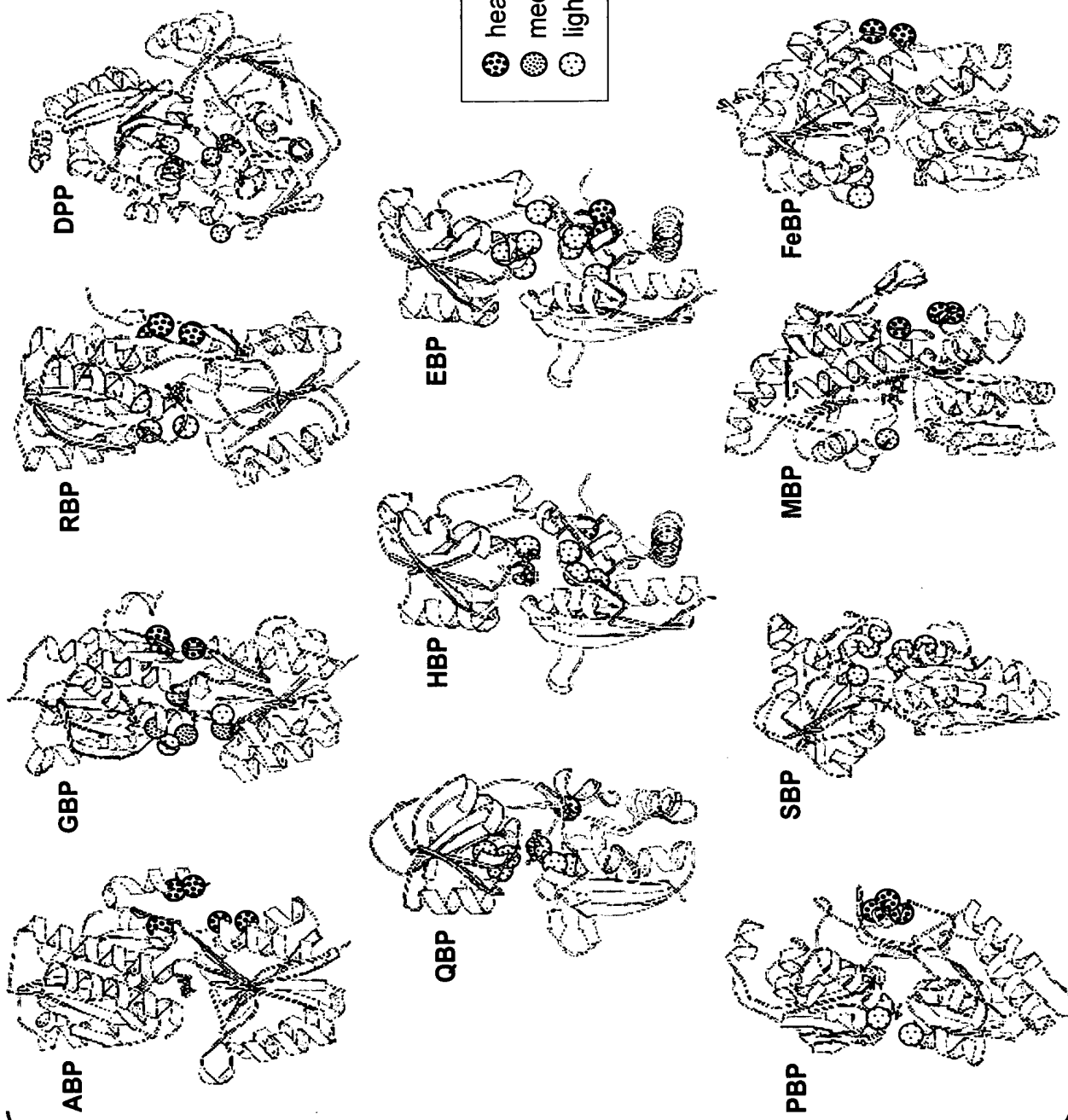


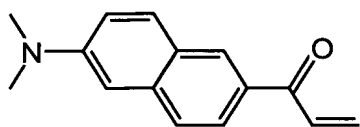
Appl. No. 10/686,529  
Atty. Dkt.: 1579-863  
REPLACEMENT SHEET  
1 of 8

heavy shading  
medium shading  
light shading

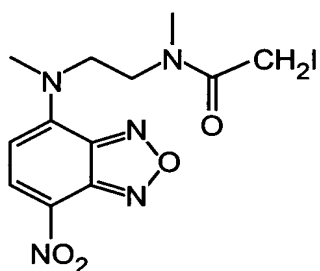


	47	67	87	107	127
gln BP	-----ADKKI.VVATD	TAFVPFEFKQGD-KYVGFDV	DLWAAIAKELK-----LD	YELKPMDFSGIIPALQTKNV	DLALAGITITDERKKAIDFS
his BP	-----AIPQNIIRIGTD	P'YAPFESKNSQGELVGFDI	DLAKELCKRIN-----TO	CTFVENPLDALIPSLKAKKI	DAIMSSLSITEKRQOEIAFT
YBEJ	MAGSTLDKIAKNGVIVVGR	ESSVPFSSYYDUNQKVGYSQ	DYSNAIVEAVKKKLNKPDQ	VKLIPIT'SQNRIPLLQNGTF	DFECGSTTNNVERQKQAAFS
				p	p
				a	a
gln BP	147	166	186	206	226
his BP	DGYXKSGLLVMVKANNNDVK	SVKDLDGKVAVKSGTGSVD	YAKANIKTK--DLRQFPNID	N--AYMELGTNRADAVLIHDT	PNILY-FIKTAGNGQFKAVG
YBEJ	DKLYAADSRLVVAKNSDIQP	TVESLKGKRVGVI.QGTTQET	FGNEHWAPKGI EIVSYQGQD	N--LYSDLTAGRIDAAAFQDE	VAASEGFLKQPVGKDYKFGG
	DTIFVVGTRLLTKKGGD- IK	DFANLKDKAVVVVTS'GTTSEV	LLNKLNEEQMNMRIISAKD	HGDSFRTLESGRVAFMMDD	ALLAGERAKAKKPDNWEIVG
	a	a	pp	pp	pp
gln BP	241	261	281	301	
his BP	DSLEAQQYG-----IAFPKG	SDELDRKVNKAIKTI.RENGT	YNEIYKKWFGTEPK-----		
YBEJ	PSVKOEKLFVGVTGMGLRKE	DNELREALNKAFAMRADGT	YEKLAKKYFDFDVYGG----		
	KPQSQEAYG-----CMLRKD	DPQFKKLMDDTIAQVQTSGE	AEKWFDKWFKNPIPPKKNLNM	NFELSDEMKA LFKEPNDKAL	N
			ppp		

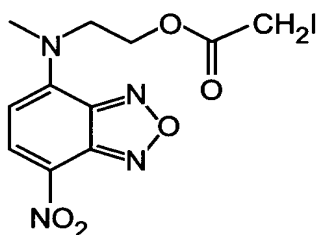
**Fig. 2**



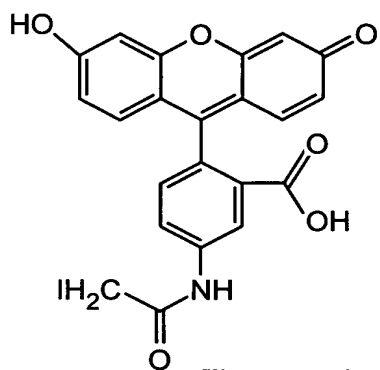
Acrylodan



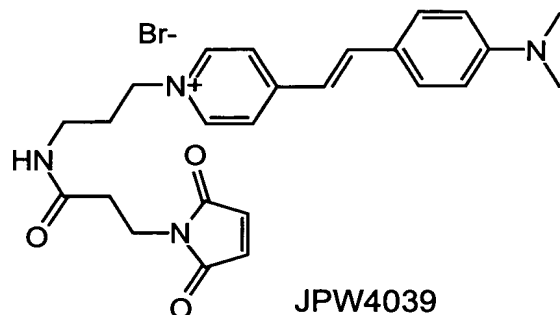
NBD



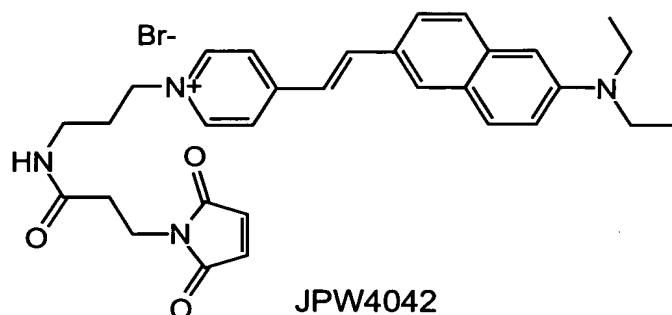
NBDE



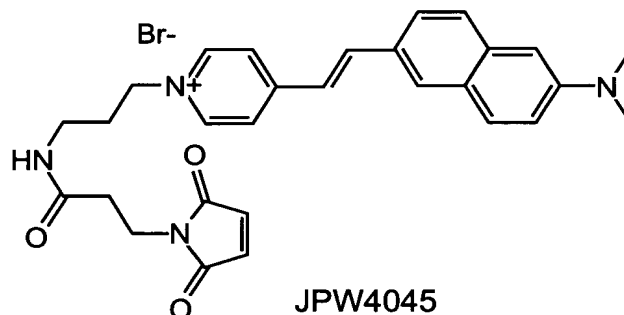
Fluorescein



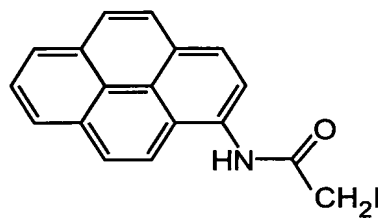
JPW4039



JPW4042

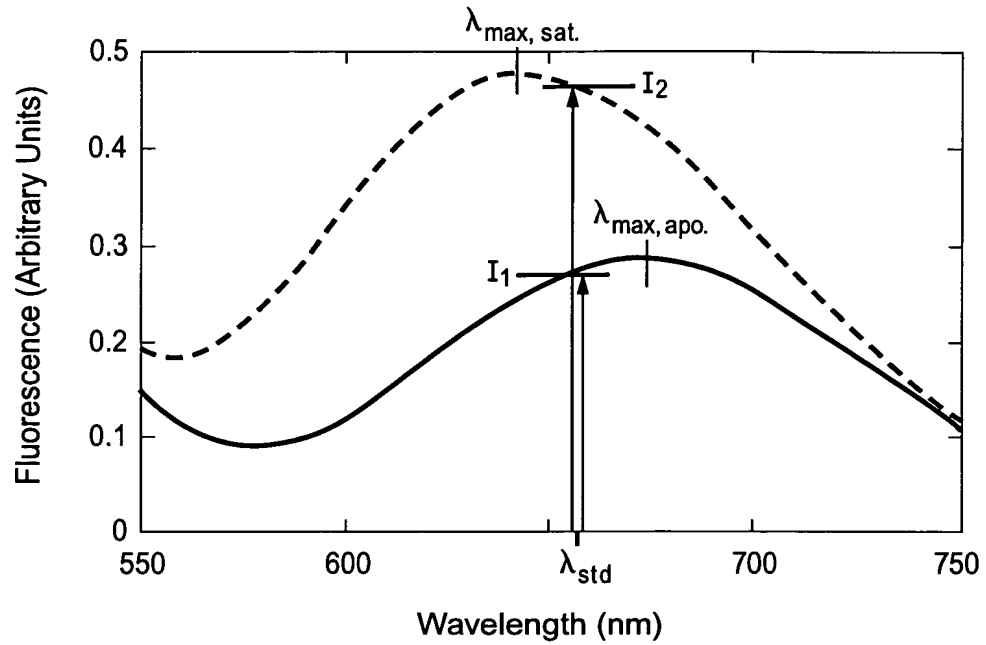


JPW4045

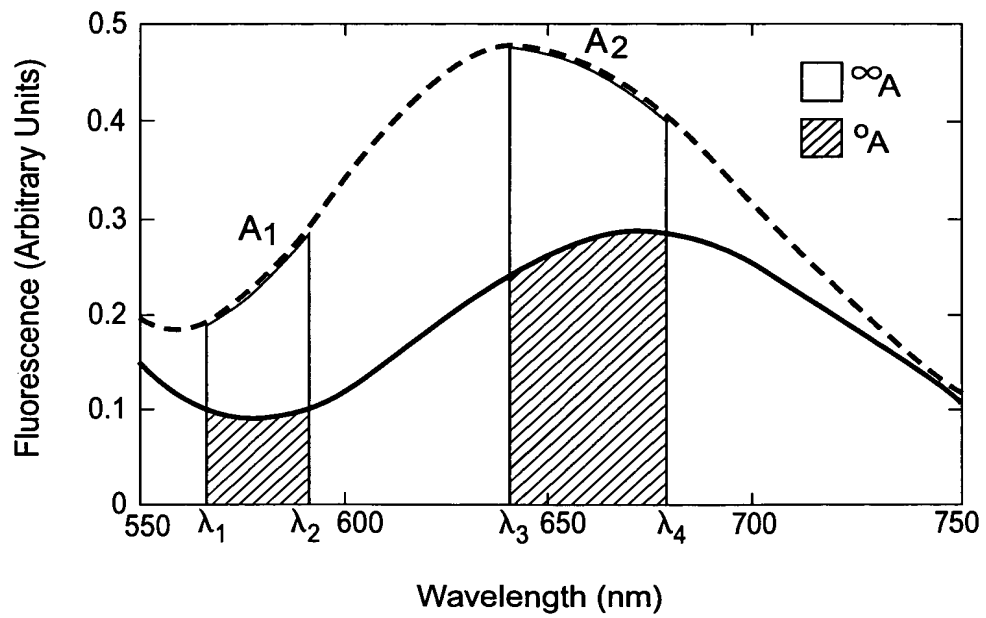


Pyrene

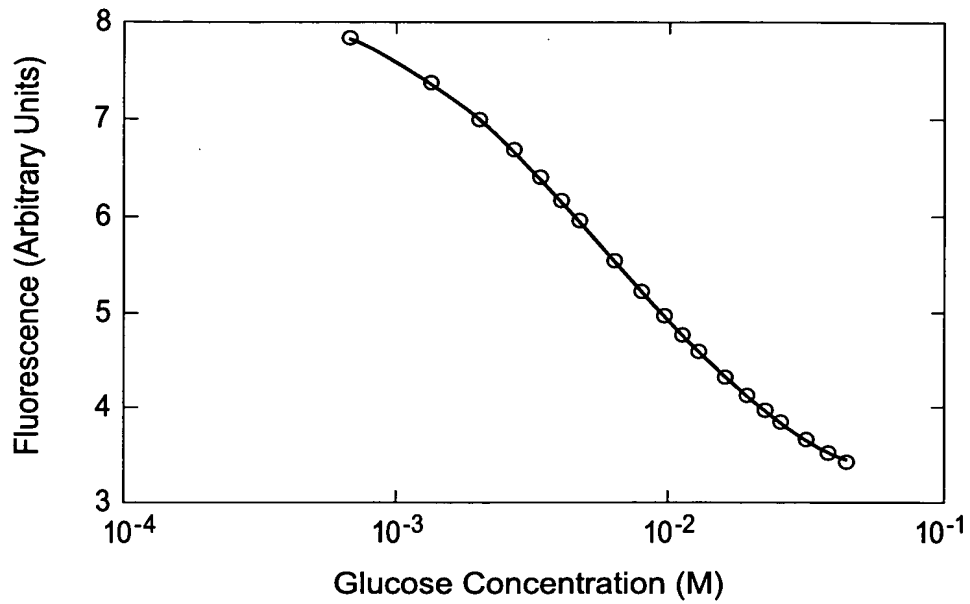
Fig. 3



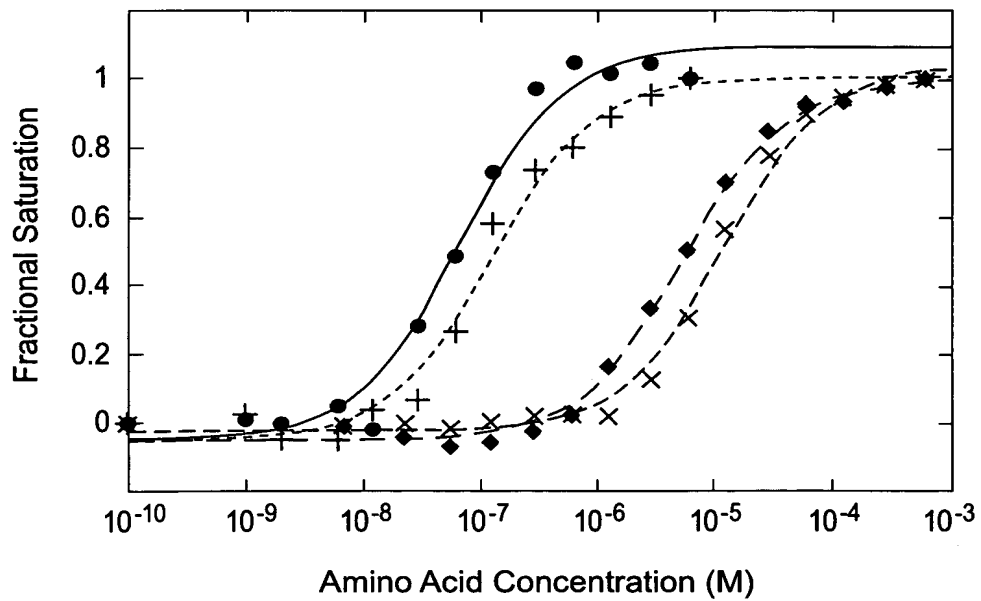
*Fig. 4A*



*Fig. 4B*

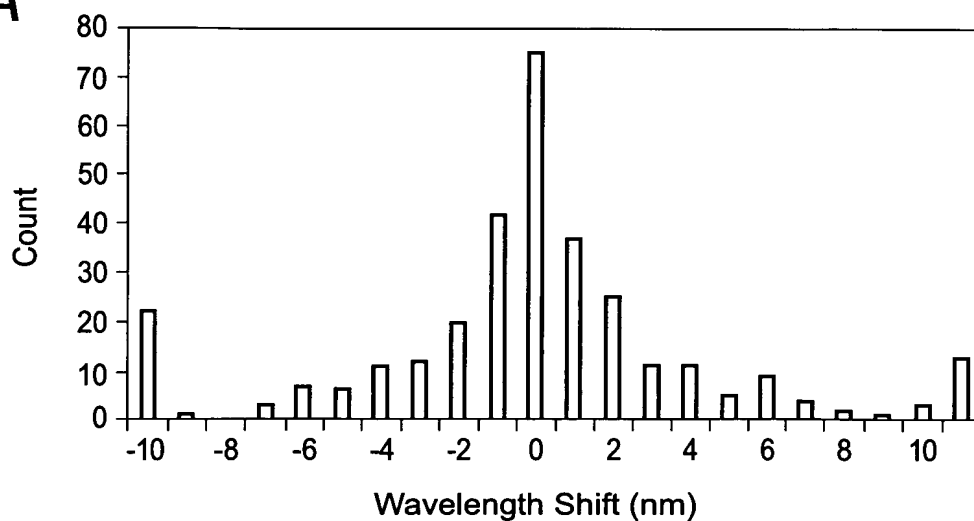


*Fig. 5A*

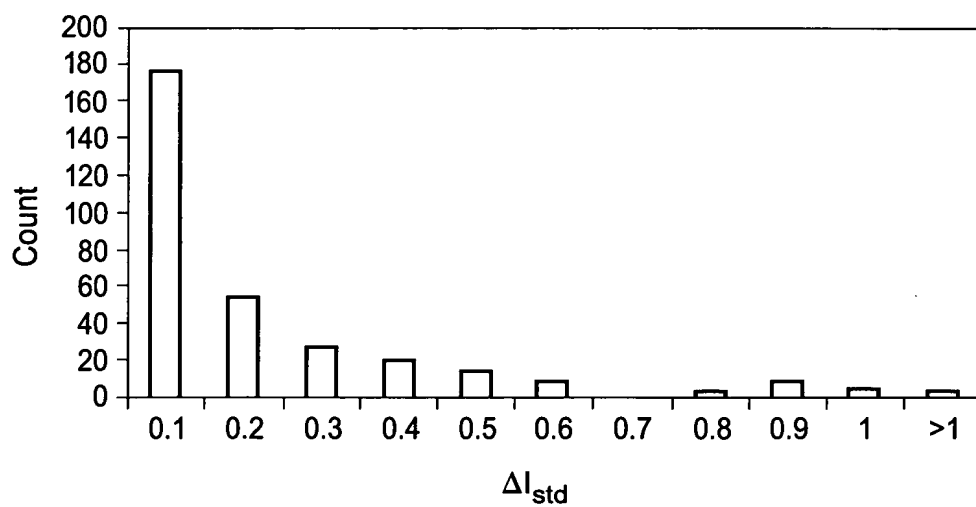


*Fig. 5B*

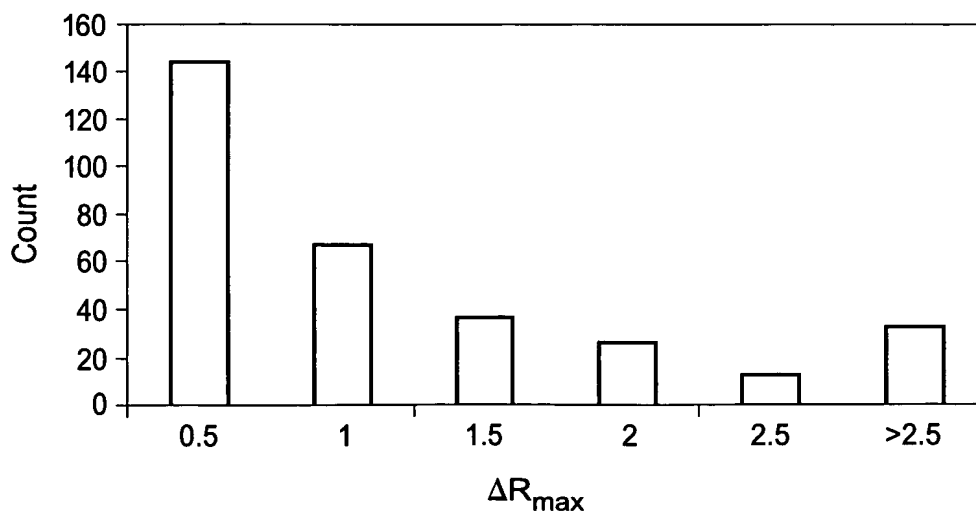
*Fig. 6A*

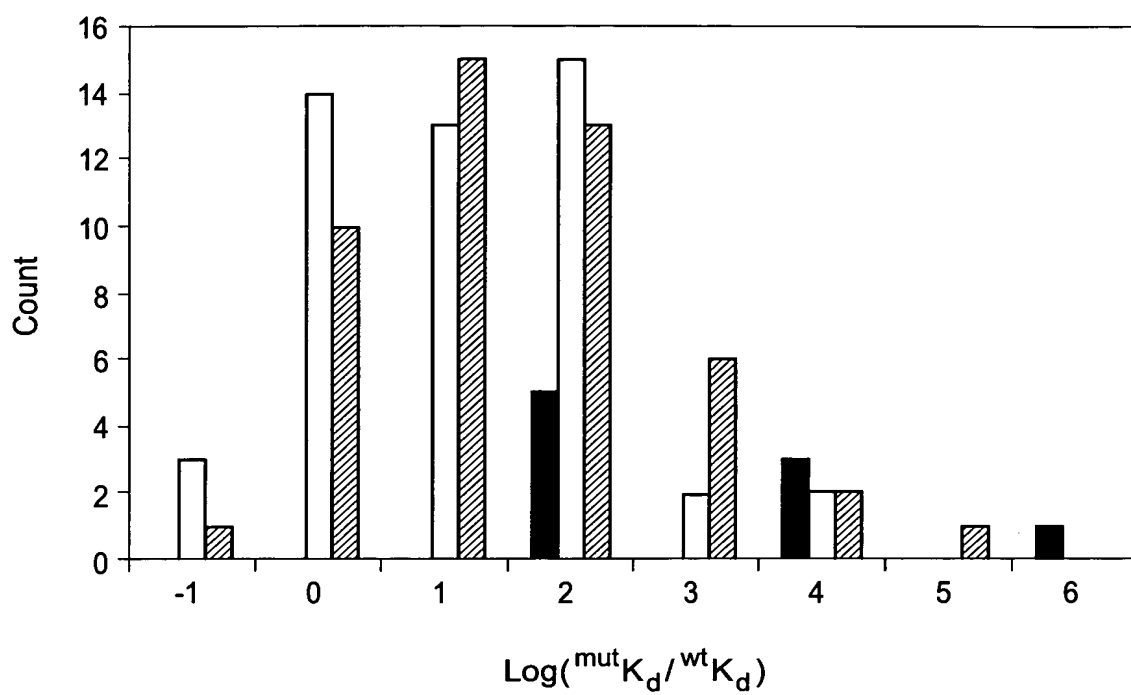


*Fig. 6B*

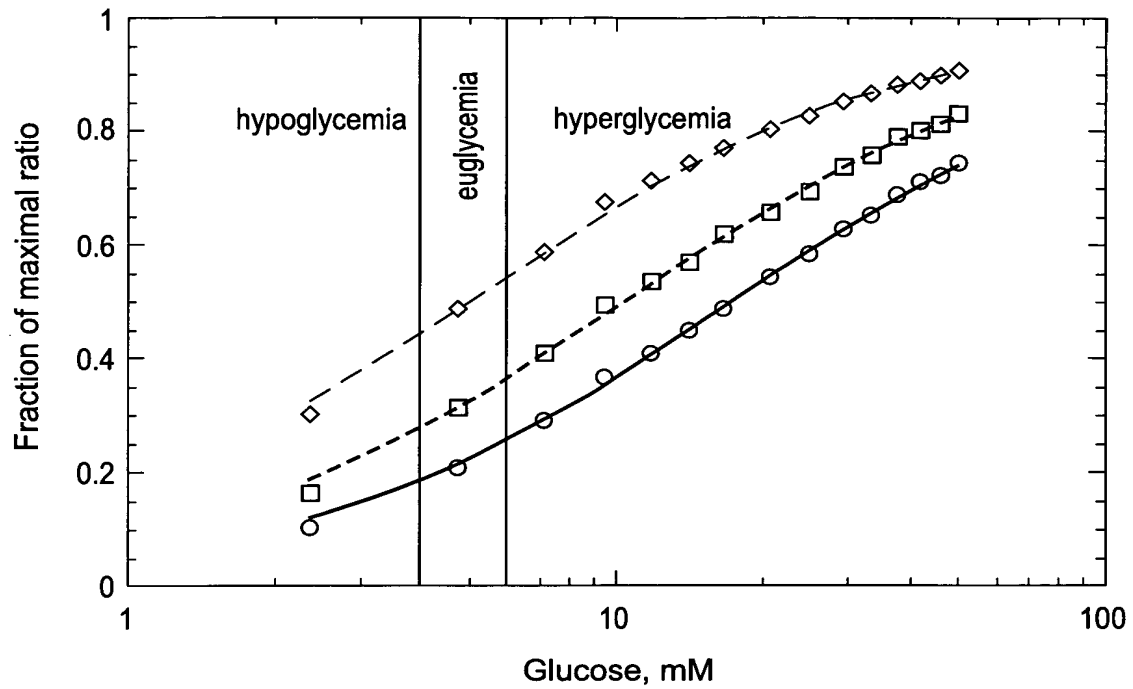


*Fig. 6C*

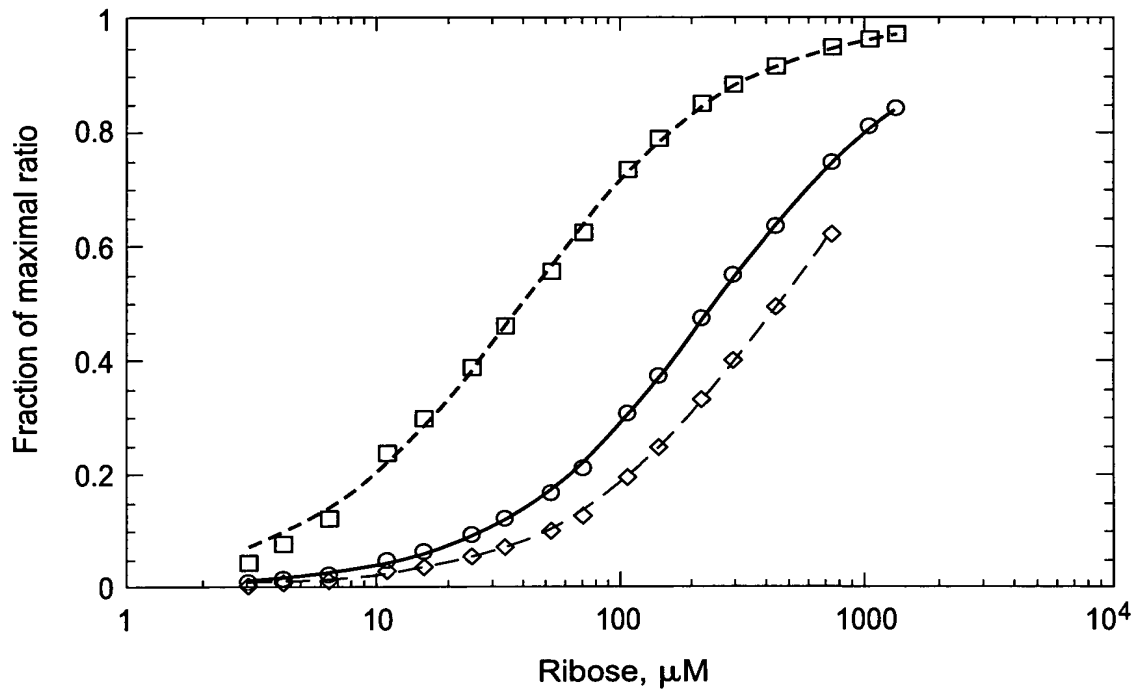




*Fig. 7*



*Fig. 8A*



*Fig. 8B*